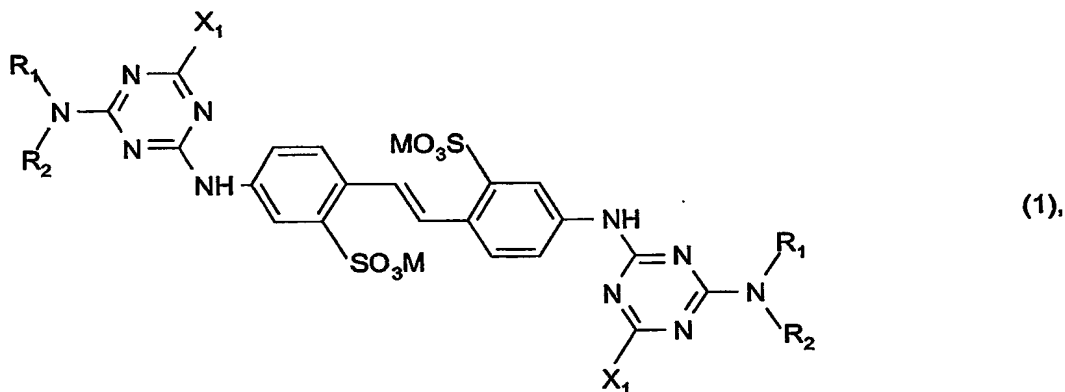


Claims

1. A whitening pigment comprising the reaction product of
 (a) a melamine-formaldehyde and/or a melamine-urea polycondensation product and
 (b) a water-soluble fluorescent whitening agent of the formula



wherein each of the two

R₁ groups, independent of the other, represents a C₁-C₆alkyl or C₁-C₄alkyl-O-C₁-C₄alkyl residue, which is substituted by one or two -CONH₂, -CONHC₁-C₄alkyl, -COOH, -SO₂NH₂, -SO₂NHC₁-C₄alkyl or -NH₂ groups, each of the two

R₂ groups, independent of the other, represents hydrogen, C₁-C₄alkyl, C₂-C₄hydroxyalkyl or C₁-C₄alkoxyC₁-C₄alkyl, or

R₁ and R₂ together with the nitrogen atom complete a piperazine ring, each of the two

X₁ groups, independently, represent -OH, -OC₁-C₄alkyl, -Oaryl or the group -NR₃R₄, wherein R₃ and R₄ each, independently, represent hydrogen, C₁-C₄alkyl, C₂-C₄hydroxyalkyl, C₁-C₄alkoxyC₁-C₄alkyl, a phenyl, phenyl mono- or disulphonic acid residue or,

R₃ and R₄, together with the nitrogen atom to which they are attached, complete a morpholino, piperidino or pyrrolidino ring or, alternatively,

X₁ represents an amino acid residue from which a hydrogen atom has been abstracted from the amino group and

M is hydrogen, an alkaline or alkaline earth metal ion, ammonium, mono- di-, tri- or tetra-substituted C₁-C₄alkylammonium or C₂-C₄hydroxyalkylammonium or mixtures thereof.

2. A whitening pigment according to claim 1, wherein the component
 (a) is a melamine-formaldehyde polycondensation product.

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3. A whitening pigment according to claims 1 or 2, wherein, in the compound of formula (1), each of the two R_1 groups, each of the two R_2 groups and each of the two X_1 groups are the same.
- 5 4. A whitening pigment according to any one of claims 1 to 3, wherein, in the compound of formula (1),
 R_1 represents a C_1 - C_4 alkyl residue, which is substituted by one $-CONH_2$ or $-CONHC_1$ - C_4 alkyl group.
- 10 5. A whitening pigment according to any one of claims 1 to 4, wherein, in the compound of formula (1),
 R_2 represents hydrogen, C_1 - C_4 alkyl or C_2 - C_4 hydroxyalkyl.
- 15 6. A whitening pigment according to any one of claims 1 to 5, wherein, in the compound of formula (1),
 X_1 represents the group $-NR_3R_4$, wherein
 R_3 represents hydrogen, C_1 - C_4 alkyl, C_2 - C_4 hydroxyalkyl, C_1 - C_4 alkoxy C_1 - C_4 alkyl, a phenyl, phenyl mono- or disulphonic acid residue,
 R_4 represents hydrogen C_1 - C_4 alkyl or C_2 - C_4 hydroxyalkyl or,
20 R_3 and R_4 , together with the nitrogen atom to which they are attached, complete a morpholino ring or, alternatively,
 X_1 represents an amino acid residue from which a nitrogen atom has been abstracted from the amino group.
- 25 7. A whitening pigment according to any one of the preceding claims, wherein, in the compound of formula (1),
 M represents hydrogen, sodium or potassium.
- 30 8. A process for the preparation of whitening pigment according to claim 1, whereby the melamine-formaldehyde or melamine-urea polycondensation product is reacted with a fluorescent whitening agent of formula (1) in aqueous medium, in the presence of mineral acid, and subsequently treated with base.

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9. Use of the whitening pigment composition, according to any one of claims 1 to 7, for the fluorescent whitening of paper.

- 5 10. A paper coating composition comprising, in addition to 0.01 to 10 parts by weight of the whitening pigment according to claim 1, per 100 parts of inorganic pigment,
- (i) from 3 to 25 parts by weight of binder and co-binder,
 - (ii) 0 to 1 part by weight of rheology modifier and
 - (iii) 0 to 2 parts by weight of wet-strength agent.

- 10 11. Use of the coating composition according to claim 10, for the fluorescent whitening of paper.

12. Paper which has been treated with whitening pigment composition according to claim 9 or a coating composition, according to claim 10.

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